



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Cedar City Field Office

176 East DL Sargent Drive

Cedar City, UT 84720

Telephone (435) 586-2401

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In Reply Refer To:

UT-042

3809: UTU-78618

UTU-80276

May 1, 2003

Mr. O. Jay Gatten
President
North American Exploration, Inc.
472 N Main Street
Kaysville, Utah 84037-1173

Dear Mr. Gatten:

I am writing in regard to a plan of operations submitted for Basin Perlite Company to expand their currently permitted perlite mine operations area (State of Utah, Division of Oil, Gas, and Mining (DOGM) large mine permit M/001/027, BLM file UTU-78618) on State and Federal lands located on Bailey Ridge, Beaver County, Utah. The plan of operations was submitted in the form of a large mine permit amendment to DOGM, a copy of which was received in this office on September 16, 2002 and was later amended and/or revised by additional submissions transmitted by cover letters dated October 4, 2002, December 11, 2002, and April 10, 2003. The portions of the permit amendment impacting BLM-managed lands propose expanding the mine operations area at the Schoo pit from the currently authorized 4.9 acre disturbance area to a 12.1 acre area. The enlarged mine operations area will provide for future pit reserves, an impoundment area to dispose of waste perlite, and a new access route to service the adjacent Pearl Queen pit located on State land. The proposed plan of operations occupies portions of the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of section 1, T. 27 S., R. 9 W., Beaver County, Utah, on the lower reaches of Bailey Ridge. The portions of the project impacting BLM lands has been assigned case file number UTU-80276, which will supersede Basin Perlite's current authorization under file UTU-78618.

The plan of operations submitted for this proposal has been found adequate to address the regulatory requirements of 43 CFR 3809.401, and this office approves the plan of operation subject to certain stipulations / mitigation measures identified through the environmental assessment prepared for the proposal. No public comments or inquiries on the proposal were received. A copy of that environmental assessment and decision record is enclosed.

Based on the potential environmental impacts identified in the environmental assessment, BLM has determined that the proposal will not have a significant effect on the human environment and an environmental impact statement will not be required. A decision has been issued to approve the proposal subject to the following mitigation / stipulations identified through the environmental assessment:

Mitigation Measures

1. The operator will contract for a Class 3 inventory of the cultural resources sites identified by the BLM archeologist within the proposed disturbance areas. The contractor, based on the results of the inventory, will have to provide to the BLM archeologist specific recommendations for any additional mitigation of the resource in advance of site disturbance. The operator will be required to carry out any mitigation chosen by the BLM.

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based on the results of the inventory of the sites in advance of the sites being disturbed by project activity. The Company can choose not to disturb the sites, if the Company determines that the required mitigation is cost prohibitive.

2. The operator will reclaim all disturbed areas when this project is completed. Reclamation should include recontouring where possible and reseeding with native species, especially important deer forage species such as cliffrose, bitterbrush and sagebrush. The seed mixture for reclamation is as follows:

<u>Species</u>	<u>lbs/acre</u>
Bluebunch wheatgrass	3
Sandburg bluegrass	1
Wyoming big sagebrush	1
Cliffrose	3
Bitterbrush	2
Curl-leaf mahogany	2
Gambel oak	2

Seed application methods will be coordinated with the BLM. Seeding will occur in late fall or early spring to increase the likelihood of species establishment. Any seed mixture adjustments that become necessary must be approved by the BLM in advance.

Stipulations

1. The operator will control all noxious weeds (noxious weeds being those that are listed as noxious under the Beaver County weed control plan) within the boundary of the project area. Control will continue until all noxious weeds have been eliminated and the project area remains weed free for two growing seasons.

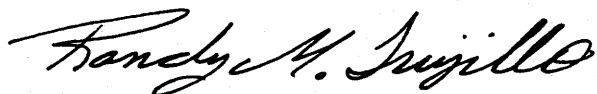
Monitoring

1. The project will be inspected by BLM personnel at least quarterly for the duration of the project.

You are reminded that you are not authorized to begin any surface disturbing activity described in the plan of operation until granted written approval through DOGM. The current bond held by the DOGM to secure reclamation of all disturbed lands within the large mine permit area, for the 5-year period of 2002 through 2007, satisfies the BLM regulatory requirement (found at 43 CFR 3809.500) for the submission of a financial guarantee to secure reclamation of the disturbed areas located on BLM-managed lands. Should it become necessary to alter this bond amount due to differences between the language of the DOGM regulations and the new 3809 regulations, you will be contacted.

If you have any questions, feel free to contact Ed Ginouves of my staff at (435) 865-3040.

Sincerely,

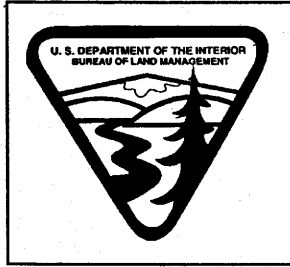


Randy M. Trujillo
Acting Field Office Manager

Enclosure: EA UT-042-02-45, Schoo Mine Expansion

cc: Mr. Tom Munson, DOGM
Mr. W.R. Wilson, Basin Perlite
Mr. Tim Hall, Basin Perlite

m/001/027



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DIV. OF OIL, GAS & MINING

**CEDAR CITY FIELD OFFICE
BUREAU OF LAND MANAGEMENT
ENVIRONMENTAL ASSESSMENT COVER SHEET**

EA Number: UT-042-02-45

File Number: UTU-80276

Preparation Date: October, 2002

Field Office: Cedar City Field Office
176 East DL Sargent Drive
Cedar City, Utah 84720

Project Title: Schoo Mine Expansion & Waste Perlite Disposal Area

Project Type: 43 CFR 3809, Plan of Operations

Applicant: Basin Perlite Company
1776 Lincoln Street, Suite 900
Denver, CO 80203

Location: SLPM, T. 27 S., R. 9 W., section 1: SW $\frac{1}{4}$ SW $\frac{1}{4}$
Beaver County, Utah

**Finding of No Significant Impact
and
Decision Record**

Schoo Mine Expansion and Waste Perlite Disposal Area
EA Number UT-042-02-45
UTU-80276

FONSI: Based on the analysis of potential environmental impacts contained in the attached environmental assessment, I have determined that the action will not have a significant effect on the human environment and an environmental impact statement is not required.

DECISION: It is my decision to authorize the proposed action as described in the environmental assessment report subject to the mitigation measures, stipulations, and monitoring given below:

Mitigation Measures

1. The operator will contract for a Class 3 inventory of the cultural resources sites identified by the BLM archeologist within the proposed disturbance areas. The contractor, based on the results of the inventory, will have to provide to the BLM archeologist specific recommendations for any additional mitigation of the resource in advance of site disturbance. The operator will be required to carry out any mitigation chosen by the BLM based on the results of the inventory of the sites in advance of the sites being disturbed by project activity. The Company can choose not to disturb the sites, if the Company determines that the required mitigation is cost prohibitive.
2. The operator will reclaim all disturbed areas when this project is completed. Reclamation should include recontouring where possible and reseeding with native species, especially important deer forage species such as cliffrose, bitterbrush and sagebrush. The seed mixture for reclamation is as follows:

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Seed application methods will be coordinated with the BLM. Seeding will occur in late fall or early spring to increase the likelihood of species establishment. Any seed mixture adjustments that become necessary must be approved by the BLM in advance.

Stipulations

1. The operator will control all noxious weeds (noxious weeds being those that are listed as noxious under the Beaver County weed control plan) within the boundary of the project area. Control will continue until all noxious weeds have been eliminated and the project area remains weed free for two growing seasons.

Monitoring

1. The project will be inspected by BLM personnel at least quarterly for the duration of the project.

RATIONALE: The decision to allow the proposed action does not result in any undue or unnecessary environmental degradation and is in conformance with the Cedar Beaver Garfield Antimony Resource Management Plan approved October 1, 1986. The proposed action was chosen because the perlite to be extracted is needed in society, the project will have a positive impact to the local economy, and environmental consequences were not determined to be at a level which would prohibit the action.

This NEPA action was posted on the electronic notification bulletin board initially on September 17, 2002. No inquiries were received regarding the proposal.

Randy M. Suijillo *11/24/02*
Field Office Manager Date
Associate

I. INTRODUCTION

Basin Perlite Company has submitted a plan of operations under regulations found at 43 CFR 3809 to expand existing surface mining operations to recover perlite from public lands located northeast of Milford, Utah. (see Project Map, Attachment 1).

Need for the Proposed Action

The purpose of the proposed action is to recover perlite from a naturally occurring deposit on Federal land, and to provide for an area to dispose of waste perlite that is presently unmarketable.

Perlite is a naturally occurring volcanic glass that contains a small amount of bound water. It is essentially a hydrated obsidian. Perlite has the composition of rhyolite with 2-5% contained water. When sized and heated to ~1000° C, perlite fuses and expands to a lightweight particle. The expanded particles exhibit low bulk density, chemical inertness, high insulating ability, fire resistance, and water retention. These properties give expanded perlite commercial value as lightweight aggregates for a variety of building materials, loose fill insulation, horticultural media, and filter aides. The United States is presently the largest producer and consumer of perlite in the world, accounting for an estimated 33% of the world production and 40% of the world consumption.

Consistent with section 2 of the Mining and Policy Act of 1970 and section 102(a)(7), (8), and (12) of the Federal Land Policy and Management Act, it is the policy of the Department of the Interior to encourage the development of Federal mineral resources and reclamation of disturbed lands. Under the mining laws, a person has statutory right, consistent with Departmental regulations, to go upon the open Federal lands for the purpose of mineral prospecting, exploration, development, extraction, and uses reasonably incident thereto.

Issues

Issues identified during scoping include minerals, cultural resources, and deer winter range.

Conformance with Land Use Plan

The Proposed Action described below is subject to the Cedar Beaver Garfield Antimony Resource Management Plan, approved October 1, 1986. Although the Proposed Action is not specifically mentioned in the plan, it is clearly consistent with the objectives, goals, and decisions of the approved plan. It has been determined that the proposed action would not conflict with other decisions throughout the plan.

Relationship to Statutes, Regulations, or Other Plans

The Proposed Action is consistent with federal, state and local laws, regulations, and plans to the maximum extent possible.

Utah's Standards for Rangeland Health address upland soils, riparian/wetlands, desired and native species and water quality. These resources are either analyzed later in this document or, if not impacted, are listed in the attached Interdisciplinary Team Review Record (Attachment 2).

II. PROPOSED ACTION AND ALTERNATIVE

Proposed Action

Basin Perlite and its predecessor Pearl Queen Perlite have recovered perlite from the Bailey Ridge deposit using surface mine methods beginning in 1994 with the opening of the Pearl Queen mine located on State land. In 2001, Basin Perlite initiated their mining operations on BLM-managed lands at the old Schoo Mine site, which dates to the early 1950's and has been active intermittently since that time. At present, Basin Perlite's total operations area includes 19.3 acres of State land and 4.9 acres of BLM land on Bailey Ridge.

Basin Perlite has submitted a plan of operations under the 43 CFR 3809 regulations, in the form of a large mine permit amendment to satisfy State of Utah, Division of Oil, Gas and Mining regulations. The permit amendment calls for expanding existing perlite mine operations located on both State and BLM lands. The amendment proposes expanding operations on BLM lands from the current 4.9 acres to 13.9 acres. The amendment will expand the existing 4.9 acre mine area by 4.0 acres to include near-term mineable reserves, and proposes a 4.5 acre impoundment area, adjacent to the mine area, to dispose of waste perlite from Basin Perlite's processing plant located in Milford. The proposal also calls for re-routing the current access road at the Schoo mine site to lessen the road grade and provide for a new all weather haul route to the Pearl Queen pit. The road re-routing would add 0.5 acre of disturbance.

Basin Perlite's current operations at the Schoo Mine site include open pit mining of perlite, crushing the raw perlite to -1" and stockpiling the perlite on site. To mine the perlite, the upper ~1' of weathered perlite and topsoil is stripped and stockpiled. The perlite, which occurs as a surface deposit 60'-100' thick, is mined by bulldozer with a ripper tooth, pushing the perlite downhill to a lower bench. The raw perlite is fed into a portable crushing plant which reduces the raw perlite to -1". The perlite is hauled to the Milford processing plant in 30 ton haul trucks. The mining and hauling is done by a contractor. The mining and stockpiling of the raw perlite is completed in a 1 to 2 month period, which is sufficient to time to accumulate a year's production needs; currently this amounts to 50-60,000 tons of perlite. Truck transportation of the raw perlite to the Milford processing plant is done year-round with 6-8 truckloads (20-30 tons/truckload) hauled each day.

Operations proposed in the mine expansion area are identical to those currently being performed. Contract mining and stockpiling of the raw perlite will continue to occur during a 1 to 2 month period each year, and contract hauling of the stockpiled perlite to the Milford processing plant will continue on a year-round basis at the rate of 6-8 truckloads/day. Disposal of the waste perlite (waste perlite is that portion of the mined perlite that is unmarketable due to size or contamination) is proposed to occur by placement within a natural dry drainage. The disposal area location was chosen to take advantage of its proximity to the mine site and its sheltered location from prevailing winds. Waste perlite from the processing plant, which would consist of mostly unmarketable fines, would be backhauled from the plant to the site in haul trucks in a pre-wetted condition. Waste perlite generated at the mine site would be conveyed to the disposal area using a front end loader. If nuisance dust from this waste perlite results in violations of applicable air quality standards, the proposed plan calls for re-wetting the waste perlite areas to keep the perlite consolidated. The waste perlite would be contained in stair-step fashion behind a series of 20' high rock dams constructed in the drainage bottom. As each step in the impoundment area is filled, the step would be covered with the salvaged topsoil and re-vegetated. The cycle of filling and reclaiming would continue to the top of the impoundment area. The waste perlite disposal area is engineered to contain 16,000 tons of waste perlite, or approximately two years of waste fines. By that time sufficient working area would be available in the Pearl Queen pit and later the Schoo pit to dispose of all future waste fines into mined out portions of the pit.

Based on current production rates, the expansion area would provide for about 5 -10 years of production and waste perlite disposal. Additional amendments would be necessary at that time to continue mine operations at the Schoo mine site.

As mined out areas of the pit are backfilled with waste perlite, they would be reclaimed by placing salvaged topsoil on the surface, adding soil amendments, and seeding with a seed mix specified by the BLM. Ultimately, all disturbed areas associated with the project would be reclaimed by recontouring or ripping,

replacing topsoil, and re-seeding. Seeding would occur in late fall or early spring , to give the best chance of seeding success.

No Action Alternative

Under the mining laws, the project proponent has the statutory right to enter and conduct exploration and mining activity, subject to applicable laws and regulations. The no action alternative, this being denial of pit expansion and waste disposal, would represent a violation of that statutory right.

Alternatives Considered but Eliminated from Detailed Analysis

Placement of the waste perlite disposal area on private or State land was considered but eliminated due to cost concerns. Disposal of the waste fines in other locations than that identified in the plan would require the company to acquire private or State land in a sheltered location to prevent excessive windblown dust. Acquisition of a suitable site and separate haulage of the material to such a site would increase the company's operating expense over that in the proposed plan but would not mitigate impacts to any critical resource.

II. AFFECTED ENVIRONMENT

General Setting

The proposed mining operation would be located on Bailey Ridge, a two mile long ridge on the west side of the Mineral Mountains, about 2 miles east of the Blundell geothermal power plant. The nearest town is Milford which lies about 13 air miles to the southwest. Bailey Ridge is bounded on the north by Negro Mag Wash (See Attachment 1). Exploration and commercial recovery of perlite from the Bailey Ridge deposit has been ongoing since the 1950's. At present, Basin Perlite operates two small surface mines, the Pearl Queen Mine and the Schoo Mine, which respectively, are located on State-managed land and BLM managed land. At present, Basin Perlite's mine permit area encompasses 24 acres. Elevations range from approximately 6,600 to 6,800 feet above sea level. The current land use is predominantly mineral exploration & production, rockhounding, and seasonal livestock grazing.

Critical Elements

BLM resource specialists have determined that the following critical elements of the human environment are not present in the area addressed in the proposed action of this EA: Areas of Critical Environmental Concern, Prime or Unique Farmlands, Floodplains, Threatened, Endangered, or Special Status Plant Species, Wetlands or Riparian Areas, Wild and Scenic Rivers, and Wilderness.

The following critical elements are present in the project area, but would not be adversely affected by the proposed action for the reasons stated below.

Air Quality: The proponent has made application for a permit from the State of Utah, Division of Air Quality. The operations would be required to comply with all applicable air quality standards. The only air quality standard of concern in the project area applies to nuisance dust emissions. The company proposes to achieve the standard by placement of perlite fines in a pre-wetted condition in an area sheltered from the prevailing winds. This material would also be re-wetted by water hauled to the site if necessary.

Threatened or Endangered Species: The bald eagle, a federally threatened species, is the only federally listed species known to occur in the project area. Bald eagles are rare winter visitors from November to mid-March and may occasionally fly over the mine site while hunting. State sensitive animals that occur in the general project area include ferruginous hawk, Swainson's hawk, peregrine falcon, and burrowing owl. A field inspection of the project area was made on September 16, 2002 and no habitat for any State sensitive species was found. A technical report for this subject can be found in case file UTU-80276 in the Cedar City Field Office.

Native American Religious Concerns: The Paiute Indian Tribe of Utah and the appropriate band have been consulted and an inspection of the project area was made by Lora Tom, Tribal Chairwoman on October 8, 2002. The Tribe was in favor of a Class 3 cultural resources survey for the sites identified by the BLM archeologist and requested that they be contacted again before BLM adopts specific mitigation measures as a result of the survey. It is possible that an adverse impact to the Paiute Tribe could result from the mitigation adopted by the BLM for the sites. Documentation of consultation is available in case file UTU-80276 in the Cedar City Field Office.

Environmental Justice: No minority or economically challenged communities would be disproportionately affected by the project.

Hazardous or Solid Waste: No hazardous waste would be generated by the proposal. Unmarketable perlite fines and baghouse dust generated by the processing of the perlite would be backhauled to the site. Initially these waste fines would be disposed of in an engineered structure adjacent to the Schoo mine until the mine areas at the Pearl Queen and Schoo pits have expanded sufficiently to allow for disposal in the mined-out pit areas. The waste fines are composed entirely of fine perlite and are chemically an inert solid mineral processing waste.

Water Quality: No perennial drainages exist in the project area and any groundwater present lies

well below the proposed pit depths of ~100'. The perlite deposits proposed for mining are chemically inert in surface climatic conditions. Fine perlite which is proposed for disposal in the dry drainage adjacent to the Schoo pit area would be contained behind short rock dams which are designed to contain a 100 year, 24 hour stormwater event for the drainage area. Stormwater runoff from the project areas could be expected to contain elevated levels of fine perlite, but no measureable impact should result from this additional particulate matter given the inert nature of the material and the character of the adjacent drainages.

Invasive/Non-native Species: As part of the plan of operations, the project proponent has agreed to monitor for and control any County-listed noxious weeds within the operating area of the project. Control would occur until all listed noxious weeds are eliminated and the project area remains weed free for two following growing seasons.

The only critical element which could be affected by the proposal is cultural resources. The impacts to cultural resources will be covered in the following section.

Resources Present and Brought Forward for Analysis

Resources which were considered for analysis are listed in the Interdisciplinary Team Review Record in Appendix 2. Resources that are not identified as having potential impacts, conflicts or issues will not be discussed further in this EA. The following resources could potentially be affected by the proposed action or alternatives.

Cultural Resources: A reconnaissance-level survey of the project area proposed for disturbance was conducted by the BLM archeologist in September, 2002. That survey identified three cultural resource sites. Two of the sites were within the proposed mine expansion area, and found to be register-eligible sites; the third site is located at the southwest edge of the proposed waste perlite disposal area, and may or may not be a register-eligible site.

Minerals: Bailey Ridge is a Quaternary-age rhyolite flow consisting of flow-banded rhyolite, obsidian, capped by perlitic rubble. Underlying the flow is likely Tertiary-aged granitic rock associated with the Mineral Mountain pluton (Sibbett and Nielson, March 1980).

The proposed action would remove about 900,000 tons of raw perlite from the Schoo Mine area of Bailey Ridge. About 90,000 tons of this perlite, in the form of unmarketable waste fines, would be returned to the project area and disposed in the fines disposal area and mined out areas of the pit.

Wildlife: The project area is high use winter range for several dozen mule deer between November and early May. Important browse species used by deer include cliffrose, bitterbrush, big sagebrush, Gambel oak, and curl-leaf mahogany. Other raptors that may be present in the area include golden eagle, red-tailed hawk, and Cooper's hawk. No raptor nests were found during the field inspection on September 16, 2002. Other wildlife found in the project area include cottontails, jackrabbits, rodents, lizards, nongame birds, and coyotes.

IV. ENVIRONMENTAL IMPACTS

Proposed Action

Cultural Resources

Direct and Indirect Impacts

The proposal could result in the destruction of three cultural resources sites. It is possible (and likely) that one of the three sites (this being the site located at the edge of the proposed operations area adjacent to proposed waste fines disposal area), would be avoided by minor alteration of the operations boundary by the project proponent. Avoidance of the two principal cultural resource sites, which overlie future mine reserves projected for mining in the next 5-10 years, is not considered likely given the greater cost to the project proponent of site avoidance versus mitigation costs. The only technically feasible options available to the project proponent for site avoidance are underground mining or re-planning mine areas around the sites. Underground mining would be economically infeasible at current market prices for the perlite. Re-planning mine areas would result in the loss of hundreds of thousands of tons of mineable reserves.

The impact from the loss of these sites will depend on the mitigation actually carried out. The impacts will be minimized by the inventory of the sites with follow up mitigation measures to be required based on the findings of that inventory.

Cumulative Impacts

Due to the large obsidian resource underlying the perlite resource on Bailey Ridge, the general area of the proposal has numerous cultural resource sites associated with the quarrying and working of the obsidian by Native Americans. Ongoing and future surface mining activity can be expected to impact that portion of the sites that fall on the upper surface of Bailey Ridge. It is unknown at present how many sites this may be or the proportion to the total number of sites in the area. Cumulative impacts to the sites falling within the mine operations area would be reduced by avoidance of the sites whenever possible. For sites that could not be avoided, impacts would be minimized by requiring Class 3 inventory of all sites encountered, with case by case additional mitigation measures based on the inventory findings.

Minerals

Direct and Indirect Impacts

In place reserves of perlite within the existing Schoo mine area and proposed Schoo mine expansion area are estimated at about 900,000 tons, based on a mineable area of 5 acres, and a mineable thickness of 60'. Essentially all of this in-place perlite would be removed by the proposal.

Cumulative Impacts

In addition to the proposed expansion of the Schoo Mine, Basin Perlite would continue to operate and expand the adjacent Pearl Queen Pit located on State land. In place perlite reserves present on State and Federal land controlled by Basin Perlite are estimated at tens of millions of tons and are sufficient to supply Basin Perlite's Milford processing plant capacity of 110,000 tons/year for decades.

Wildlife

Direct and Indirect Impacts

Expansion of this project would have no affect on T/E, state sensitive, and other raptor species or their habitat. There would be a loss of an additional 10 acres of mule deer winter habitat and nongame wildlife habitat over the life of this project. There would also be an increase in secondary impacts to deer and other wildlife from truck traffic and machinery noise, which would effectively reduce wildlife use on an additional 10

to 50 acres of adjacent undisturbed land. Deer and other wildlife affected by mining activities would move to adjacent undisturbed sites to avoid those activities, so overall impacts to wildlife would be very minimal.

Cumulative Impacts

Continuous mining over approximately 50 years would result in the eventual loss of up to 100 acres of wildlife habitat. Disturbed sites would be rehabilitated on a continuous basis when mining is completed, but disturbed sites would not receive much use by wildlife until those sites are recovered with suitable vegetation. In a worse case scenario, revegetation of disturbed sites may not occur during the life of the project and 100 acres of wildlife habitat would be lost for 50+ years.

Mitigation Measures

1. The operator will contract for a Class 3 inventory of the cultural resources sites identified by the BLM archeologist within the proposed disturbance areas. The contractor, based on the results of the inventory, will have to provide to the BLM archeologist specific recommendations for any additional mitigation of the resource in advance of site disturbance. The operator will be required to carry out any mitigation chosen by the BLM based on the results of the inventory of the sites in advance of the sites being disturbed by project activity. The Company can choose not to disturb the sites, if the Company determines that the required mitigation is cost prohibitive.
2. The operator will reclaim all disturbed areas when this project is completed. Reclamation should include recontouring where possible and reseeding with native species, especially important deer forage species such as cliffrose, bitterbrush and sagebrush. The seed mixture for reclamation is as follows:

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Stipulations

1. The operator will control all noxious weeds (noxious weeds being those that are listed as noxious under the Beaver County weed control plan) within the boundary of the project area. Control will continue until all noxious weeds have been eliminated and the project area remains weed free for two growing seasons.

Monitoring

1. The project will be inspected by BLM personnel at least quarterly for the duration of the project.

V. PERSONS OR AGENCIES CONSULTED

Mr. O.J. Gatten, President, North American Mine Services, Inc.
Mr. Tim Hall, Vice-President, Perlite Operations, Basin Perlite Company
State of Utah, Department of Natural Resources, Division of Oil, Gas, and Mining

VI. LIST OF PREPARERS

Bob Edwards - Natural Resource Specialist, CCFO. Contributed information pertaining to soils, threatened and endangered plants, noxious weeds, and visual resources.

Gardiner Dalley - Archeologist, CCFO. Contributed information pertaining to cultural resources.

Ed Ginouves - Mining Engineer, CCFO. Project Leader. Contributed information pertaining to minerals resources, land status, rights-of-way, and solid waste, range, wild horses.

Steve Hedges - Wildlife Biologist, Cedar City Field Office (CCFO). Contributed information pertaining to wildlife resources, threatened and endangered animal species and riparian/wetland resources.

VII. PUBLIC NOTICE AND AVAILABILITY

The proposed action was placed on the electronic notification bulletin board on September 17, 2002.

VII. REFERENCES

Anon, 2001, Demographic and Economic Analysis for Beaver County, State of Utah, Governor's Office of Planning and Budget.

Breese, Richard O.Y., and Barker, James M., 1994, Perlite, *in* Industrial Minerals and Rocks, 6th Edition, Donald D. Carr, Senior Editor; Society for Mining, Metallurgy, and Exploration, Inc., 1994, p 735-749.

BLM Case File UTU-80276, Schoo Mine / Disposal Area: Surface Management Files, BLM Cedar City Field Office.

Bolen, Wallace P., 2002, Perlite, *in* Mineral Commodity Summaries 2001: U.S. Geological Survey, January 2002, p. 120-121.

Sibbett, Bruce S., and Neilson, Dennis L., 1980, Geology of the Central Mineral Mountains, Beaver County, Utah: DOE/ET/28392-40, March, 1980, 48 p. w/ plates.

VIII. ATTACHMENTS

1. Project Map
2. Interdisciplinary Team Review Record

SOUTHWEST UTAH SUPPORT AREA INTERDISCIPLINARY TEAM REVIEW RECORD

Project Title: Schoo Mine Expansion

DNA/EA Number: UT-040-02-45

Project Leader: Ed Ginouves

Plan Decision/Objective: CBGA RMP, dated Oct. 10, 1986

Project Number: UTU-80276

Date Proposal Received: Sept. 16, 2002

Date of Public Notification: Sept. 17, 2002

FOR EAs: NI: resource/use present but not impacted; PI: potentially impacted; NP: not present

FOR DNAs only: NC (anticipated resource impacts not changed from those analyzed in the original EA) - must attach original checklist when routing this for specialist review.

STAFF REVIEW OF PROPOSAL:

NI/PI/NP	Name/Discipline	Date Reviewed	Signature	Review Comments (required for all NIs and PIs. PIs may require further analysis.)
NI	Grazing/Rangeland Standards & Guides	9/30/02	J. Fenton	SEE ATTACHMENT I
NI	Vegetation	10/28/02	Ed Timm	
NP	Invasive, Non-native Species	10/21/02	RDE	Options need control will occur as per agreement by the applicant & control weeds
NI	Woodland/Forestry	9-30-02	RDE	Impact to woodland is minimal
NP	Special Status Plants	9-30-02	RDE	
PI	Fish & Wildlife	9/30/02	A. Hedges	Loss of crucial deer winter range.
NI	Special Status Animals	9/30/02	A. Hedges	No impact to TES habitat
NP	Wetlands/Riparian Zones	9/30/02	A. Hedges	
NI	Soils (including Biological Soil Crusts)	9-30-02	RDE	Impact to soil is minimal if plan implemented as proposed
NP	Floodplains	9/17/02	Ed Timm	
NI	Air Quality	9/17/02	Ed Timm	
NI	Water Quality (drinking/ground)	9/17/02	Ed Timm	
NP	Water Rights	9-30-02	RDE	
NP	Recreation (including ACECs)	10/28/02	Ed Timm	

EA UT-040-02-45

Basin Perlite Co - Schoo Mine Expansion

Attachment 1: SUSA ITTR

NP	Wild & Scenic Rivers	9-30-02	BSI	
NP	Wilderness Concerns	9-30-02	BSI	
NI	Visual Resources	9-30-02	BSI	The proposal is in a VPM class III. The objective for this VPM class would be met.
PI	Geology/Mineral Resources	9/17/02	Ed Timm	
NP	Paleontology	9/17/02	Ed Timm	
PI	Cultural Resources (Historic/Archaeological)	9/30/02	Y7 Nally	See report - sites are present & will need documentation, probably, mitigation.
NI	Native American Religious Concerns/Tribal Consultation	10-10-02	Stenwarch	See attached Project Response Letter
NP	Lands Issues (including ROW/Access)	9/17/02	Ed Timm	
NI	Fuels/Fire Management	9/30/02	S. Small	No impact to Fire/Fuels management
NP	Wastes (hazardous or solid)	10/28/02	Ed Timm	
NI	Environmental Justice	9/17/02	Ed Timm	No Minority or economically challenged populations would be disproportionately affected.
NI	Socio-economics	10/28/02	Ed Timm	
NP	Prime or Unique Farmlands	9/17/02	Ed Timm	
NP	Wild Horses	9/17/02	Ed Timm	

FINAL REVIEW	Date	Signature	Comments
Environmental Coordinator	10/29/02	Larry K. Zupelt	
Manager Review	11/11/02	Randy M. Hignite	

Sept. 2002

Attachment I
Schoo Mine Expansion Project
Grazing/Rangeland Standards and Guidelines

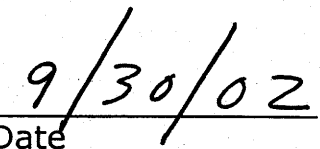
The Schoo Mine Expansion Project is located at Township 27 South, Range 9 West, Section 1 SW $\frac{1}{4}$ SW $\frac{1}{4}$ and is within the West Use Area of the Mineral Range Allotment No. 06107. The total permitted animal units months (AUMs) on the West Use Area is 3503 AUMs. Of the total, 1918 AUMs are active and 1585 AUMs are suspended.

The total AUM loss as a result of the Schoo Mine Expansion Project is estimated at 1 to 2 AUMs or approximately 0.1 percent of the active AUMs. There should be no adverse impacts to the West Use Area permittees because the AUM loss is very minimal.

AUM Summary
Mineral Range (West Use Area) Permittees

Permittee	AUM Summary		
	Active	Suspended	Total
Linda M. Baldwin	118	110	228
Jetta Davie	109	100	209
Danny and Rowland Yardley	184	154	338
Michael D. Yardley	1436	1154	2590
Verlene Yardley	71	67	138


Jeffrey E. Fenton, Rangeland Management Specialist


Date

